

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/051022

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04B1/30 H03B5/32 H03D11/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H03B H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y X	US 5 983 084 A (LIN XING PING) 9 November 1999 (1999-11-09) column 1, lines 5-10 column 3, lines 11,12 column 3, lines 17-20 column 3, lines 23-26 figure 2	1-11,14 12
Y X	US 4 794 622 A (ANDRUS DAVID C ET AL) 27 December 1988 (1988-12-27) column 2, line 33 - column 3, line 4 figures 1-3 ----- -/--	1-11,14 12

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

20 October 2004

Date of mailing of the international search report

02/11/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 742 902 A (SHORE JERRY LYNN)	1-11,14
X	21 April 1998 (1998-04-21)	13
	column 3, lines 25-56	
	column 8, lines 20-23	
	figures 1,2,5,7,8	
Y	EP 1 045 524 A (VALEO ELECTRONIQUE)	1-11,14
X	18 October 2000 (2000-10-18)	13
	paragraphs '0021! - '0024!	
	figure 3	

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Information on patent family members

International Application No

PCT/IB2004/051022

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5983084	A	09-11-1999	NONE	
US 4794622	A	27-12-1988	NONE	
US 5742902	A	21-04-1998	NONE	
EP 1045524	A	18-10-2000	FR 2792477 A1 EP 1045524 A1	20-10-2000 18-10-2000